30 June 2017

Public Finance

Federal Republic of Germany Rating Report

AAA STABLE OUTLOOK

Credit strengths

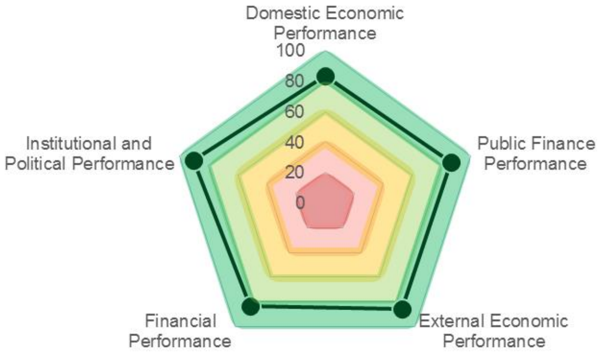
- Large and diversified economy
- Solid fiscal framework
- Fiscal consolidation track record
- Strong external accounts

Credit weaknesses

- Ageing working population
- Banking sector fragilities

Rating rationale and Outlook: Germany's AAA ratings are underpinned by the solid performance of its highly diversified economy – also the largest in the euro area. The robust, competitive economy has helped to control as well as reduce public-finance ratios. Furthermore, the country has demonstrated its consolidation skills through fiscal policies aimed at balancing government budgets. Government debt also benefits from the German Bunds' international safe haven status, securing market access at moderate financing costs even in times of market turbulence. The Stable Outlook reflects Scope's view that Germany's current challenges are manageable and securely counterbalanced by its strengths.

Figure 1: Summary of sovereign rating categories



Source: Scope Ratings AG

Positive rating-change drivers

- Not applicable

Negative rating-change drivers

- A substantial negative trend change in fiscal and debt metrics

Ratings & Outlook

Foreign currency

Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

Local currency

Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

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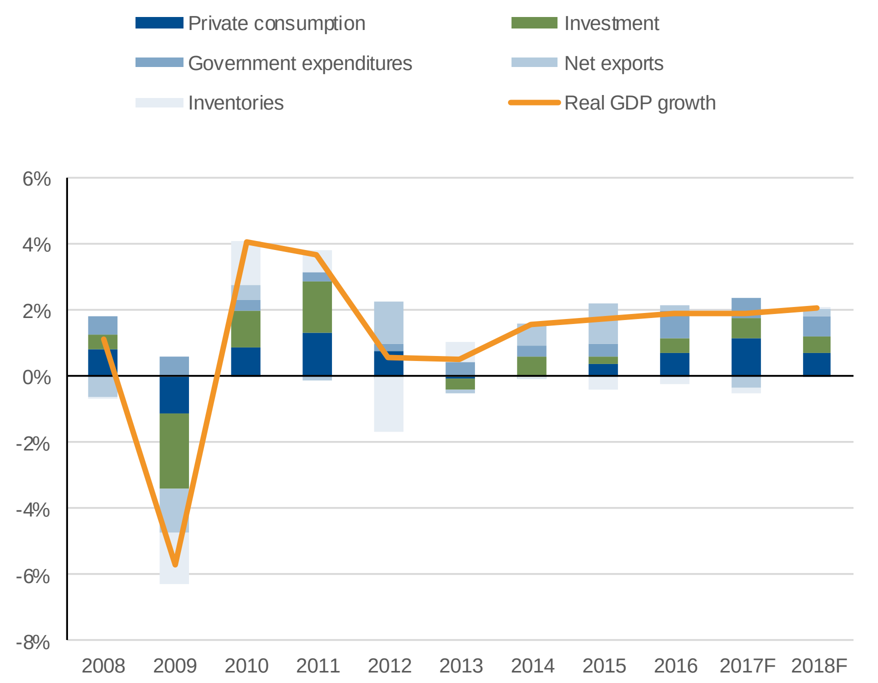
Bloomberg: SCOP

Domestic economic risk

Economic growth likely to continue at around 2%

The performance of Germany's economy continues to be a key credit strength, having absorbed the shocks of the global financial crisis and the euro crisis. The economy also has a competitive high value-adding manufacturing sector and an efficient labour market. In addition, recent indicators point to further economic recovery in 2017. The strong labour market, very modest financing costs and buoyant construction activity are the main drivers for growth and consumption.

Figure 2: Percentage point contribution to real GDP growth



Source: IMF, Calculations by Scope Ratings AG

The German economy accounts for almost 29% of euro area output, making it the largest in the monetary union and fourth in the world. This size makes it easier for the sovereign to absorb external and internal challenges, such as contingent liabilities related to the banking sector, or the influx of refugees. The level of wealth also helps to mitigate shocks by offering various options for generating tax revenue.

However, in contrast to most euro area countries, there is still room for further public expenditure that can help to sustain the rate of economic growth. The German economy will also benefit from a strengthening global recovery; although uncertainties around Brexit negotiations and US trade policy still generate downside risk. Scope expects German real GDP to continue to grow by approximately 2% in 2017 and 2018.

The economy's robust revenue is also underpinned by its record of current-account surpluses of around 8% of GDP. Moreover, German corporations and households benefit from robust balance-sheet positions, which have generated a strong net lending position on the macro level. This has helped to keep external debt at relatively moderate levels.

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Public finance risk

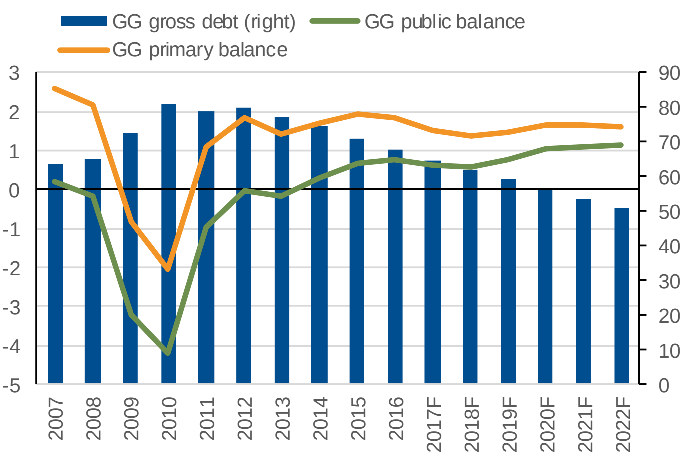
Rule-based, credible fiscal policies

Germany's fiscal policies are credit-positive as they help to supress budgetary risks. The country's discipline in this area achieved constitutional status in 2009 and is clearly defined at both sovereign and sub-sovereign level. The 'debt brake' stipulates that the structural federal deficit cannot exceed 0.35% of the GDP from 2016 and that German Länder (federal states) cannot generate any structural deficits from 2020.

However, social transfers have outpaced savings from declining interest costs, causing a rise in current government expenditure. Public consumption and investment linked to refugee-related expenditures are also expected to remain relatively high. With rather stable government revenue ratios, the government's structural budget surplus is set to decline to around 0.3% of GDP.

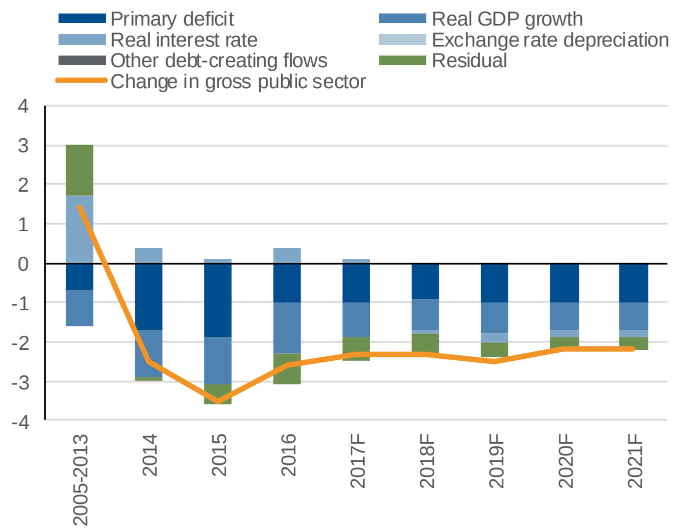
The share of general government debt to GDP has declined by nearly 10 percentage points over the past three years. Since the European sovereign debt crisis began, Germany has continued to benefit from flight to quality, resulting in refinancing costs reaching record lows. With ongoing budget surpluses as well as favourable growth and financing prospects, Scope expects the debt-to-GDP ratio to further decrease from 68.3% in 2016 to around 62% in 2018. With this solid downward trajectory, this ratio could fall below 60% by 2020.

Figure 3: Fiscal developments, % of GDP



Source: IMF

Figure 4: Debt-creating flows, % of GDP



Source: IMF

Germany's public-debt ratio is on a solid downward trend due to robust economic growth, strong government revenues and expenditure control, as well as the country's extremely low financing costs. However, Scope anticipates risks in the medium to long term, particularly in relation to population trends.

Significant migration inflows due to the refugee crisis have generated political, social and fiscal risks. Germany saw an influx of nearly 900,000 refugees in 2015 and 280,000 in 2016. Such levels create challenges for social and economic integration. Government expenditure to manage the influx has had a cyclical effect on the economy, while higher-than-expected public spending may put some pressure on public finances.

Ageing of the society is a challenge

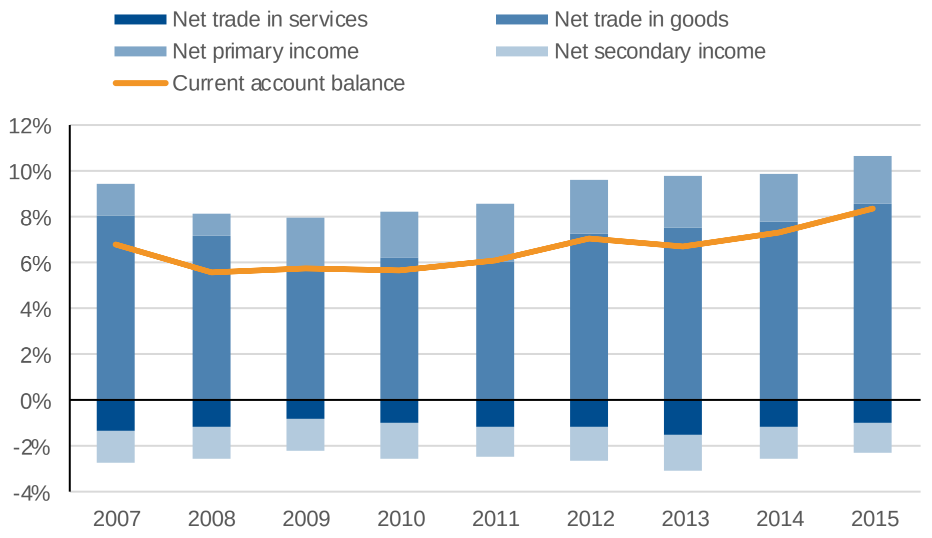
The ageing of German society is causing a meaningful decline in the working-age population, creating uncertainties around the country's economic growth potential for the medium to long term. Together with rising unfunded pension liabilities this may impact the long-term sustainability of public finances. The demographic change is likely to increase age-related spending and dampen government revenue generation on the back of weaker economic growth. To help to mitigate this, further adjustments to the social security and pension systems are needed. Even so, Scope believes the government will face challenges in addressing these issues, including achieving a consensus with the ageing electorate when it comes to reforms.

External economic risk

Current-account surplus expands further

External risks in terms of capital account vulnerabilities are low, given the country's sound net international investment position. This stood at 48.7% of GDP at end- 2016 compared to 46.0% at the end of 2015, driven by the high current-account surplus, which reached almost 9% of GDP in 2016. Germany's net creditor position has also been supported by the steady increase in current-account surpluses since 2002. The high current-account surplus is derived from the country's strong merchandise balance and growing primary income balance, and can be explained by a mix of cyclical and structural factors.

Figure 5: Current-account balance % of GDP



Source: IMF, Calculations Scope Rating AG

Cyclical factors include favourable terms of trade: the positive difference between export and import prices. This was particularly supportive during 2014-2016, largely due the pronounced decline in low energy prices, which is of particular benefit because Germany imports almost 60% of its fuel. Another factor is ultra-low interest rates, which has reduced substantially the investment income of non-residents in Germany versus the investment revenue of German businesses operating abroad. Lastly, a weaker euro in both 2015 and 2016 has made German goods even more attractive.

Among structural factors, Scope notes a high saving rate – driven largely by the ageing population – that has not been absorbed by domestic investment. Another factor is high international competitiveness, mostly from the manufacturing and chemical industries that offer complex and high-tech products.

In the short run, Scope believes most cyclical factors will continue to be supportive, albeit to a lesser extent than before. One example is oil prices, which seem to be bottoming out; in Scope's view, this will decrease the current-account surplus slightly in the medium term, which, however, will continue to boost net international investment position.

Germany is one of the few net external creditors in the euro area. While this makes it immune from sudden disruptions to external credit flow, it exposes it to a potential deterioration in its foreign assets.

Financial stability risk

Banking sector challenged by strong competition and low business margins

Germany's banking sector is medium-sized and well capitalised relative to peers. Banking assets comprise roughly 252% of GDP, considerably smaller than that in France (386%) or the Netherlands (379%). However, the banking sector in Germany has relatively strong cooperative and public-bank pillars with a relatively low concentration of banks.

The German financial sector continues to grapple with ultra-low interest rates, intense competition, crisis legacy issues, and a high cost base, all of which dampen profits. Margins have gradually eroded, especially in smaller retail banks. On the most exposed banks, regular stress tests and simulations by supervisors have also led to additional capital requirements.

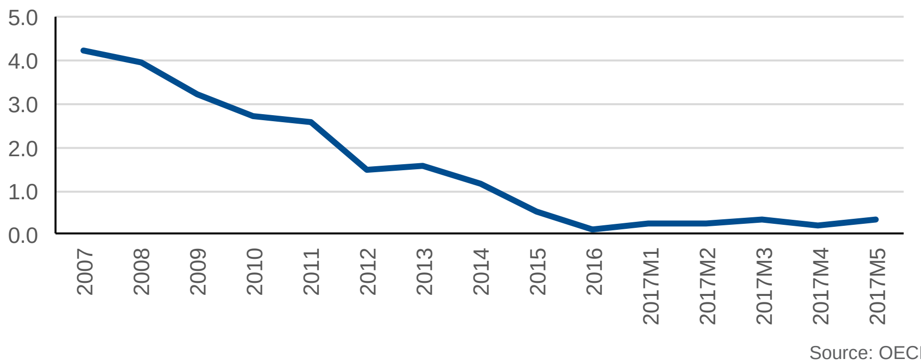
Consolidation of financial institutions and restructuring of business lines have been rather subdued during and following the financial crisis and appear now more urgent in the light of diminishing profitability and increased capital requirements. This might to a degree undermine the banks' competitiveness compared with international peers and will weight for some time longer on the profitability of the banks.

Furthermore, still unresolved legacy issues, particularly stemming from the recent financial crisis, might erupt at some point and put some further strains on the system going forward, not only from a financial, but also from a political and logistical angel.

However, regulatory capital is now generally comfortable: the Tier 1 core capital ratio is above the euro area average of 14.3%, and the Bank Recovery and Resolution Directive (BRRD) is limiting risks of contingent liabilities from the banking sector. Furthermore, Scope believes German public finances can absorb potential adverse economic and financial shocks without having to compromise on medium-term control of the debt trajectory.

Although the German housing market is currently buoyant with house prices increasing by around 6.3% in 2016, available data suggests that it does not constitute a risk to financial stability.

Figure 6: Long-term interest rates based on 10Y Bund



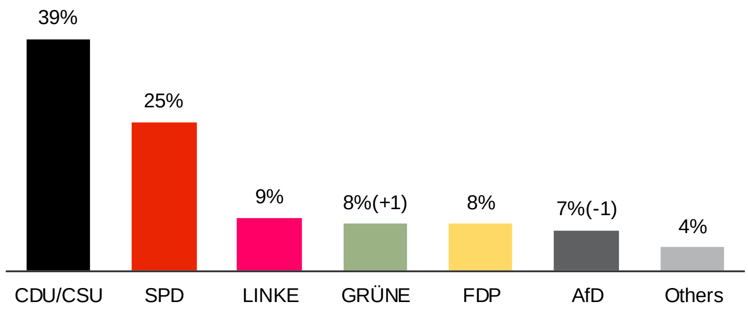
Source: OECD

Institutional and political risk

Political and economic consensus policies

In case of a failure to adequately integrate refugees into the labour market this may lead to social and political risk. In this regard, important uncertainties persist. Yet, despite the emergence of anti-establishment and populist political forces in Germany, Scope expects political and economic consensus policies to be maintained.

Figure 7: Bundestag Election Polls (June 2017)



Source: Forschungsgruppe Wahlen

Elections are unlikely to change policymaking

Ahead of the next federal election on 24 September 2017, the CDU/CSU continues to top opinion polls (Figure 7), with the elections unlikely to yield substantially different policies. Scope expects the next government to cut taxes of around 0.5% of GDP (given ongoing fiscal surpluses), increase infrastructure investments and tighten labour market regulation.

Methodology

The methodology applicable for this rating and/or rating outlook "Public Finance Sovereign Ratings" is available on www.scoperatings.com.

Historical default rates of Scope Ratings can be viewed in the rating performance report on https://www.scoperatings.com/governance-and-policies/regulatory/esma-registration. Please also refer to the central platform (CEREP) of the European Securities and Markets Authority (ESMA): http://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml. A comprehensive clarification of Scope's definition of default, definitions of rating notations can be found in Scope's public Credit Rating methodologies on www.scoperatings.com.

The rating outlook indicates the most likely direction of the rating if the rating were to change within the next 12 to 18 months. A rating change is, however, not automatically ensured.

I. Appendix: CVS and QS Results

Sovereign rating scorecards

Scope's Core Variable Scorecard (CVS), which is based on the relative rankings of key sovereign credit fundamentals, provides an indicative AAA (aaa) rating range for the German sovereign. This indicative rating range can be adjusted by the Qualitative Scorecard (QS) by up to three notches depending on the extent of relative credit strengths or weaknesses as compared to peers, based on Scope analysts' qualitative findings. For Germany, relative credit strengths have been identified for the following analytical categories: i) growth potential for the economy; ii) market access and funding sources for the sovereign; iii) external economic risk; and iv) political risk. A relative credit weakness has been identified for financial stability. Combined CVS and QS analysis indicate a AAA sovereign rating for Germany. The results have been discussed and confirmed by a rating committee.

Rating overview

CVS indicative rating range	aaa
QS adjustment	AAA
Final rating	AAA

To calculate the rating score within the CVS, Scope uses a minimum-maximum algorithm to determine a rating score for each of the 22 indicators. Scope calculates the minimum and maximum of each rating indicator and places each sovereign within this range. Sovereigns with the strongest results for each rating indicator receive the highest rating score; sovereigns with the weakest results receive the lowest rating score. The result is converted into an indicative rating range that is always presented in lower-case rating score.

Within the QS assessment the analyst conducts a comprehensive review of the qualitative factors. This includes but is not limited to economic scenario analysis, review of debt sustainability, fiscal and financial performance and policy implementation assessments.

There are three assessments per category for a total of fifteen. For each assessment, the analyst examines the relative position of a given sovereign within its peer group. For this purpose, additional comparative analysis beyond the variables included in the CVS is conducted. These assessments are then aggregated using the same weighting system as in the CVS.

The result is the implied QS notch adjustment, which is the basis for the analyst recommendation to the rating committee.

II. Appendix: CVS and QS Results

CVS: Rating indicator	Category weight	QS (*Maximum adjustment = 3 notches*)	+2 notch	+1 notch	0 notch	-1 notch	-2 notch
Domestic economic risk	35%	Growth potential of the economy	○ Excellent outlook, strong growth potential	● Strong outlook, good growth potential	○ Neutral	○ Weak outlook, growth potential under trend	○ Very weak outlook, growth potential well under trend or negative
Economic growth Real GDP growth Real GDP volatility GDP per capita Inflation rate		Economic policy framework	○ Excellent	○ Good	● Neutral	○ Poor	○ Inadequate
Labour & population Unemployment rate Population growth		Macroeconomic stability and imbalances	○ Excellent	○ Good	● Neutral	○ Poor	○ Inadequate
Public finance risk Fiscal balance GG public balance	30%	Fiscal performance	○ Exceptionally strong performance	○ Strong performance	● Neutral	○ Weak performance	○ Problematic performance
GG primary balance GG gross financing needs Public debt		Debt sustainability	○ Exceptionally strong sustainability	○ Strong sustainability	● Neutral	○ Weak sustainability	○ Not sustainable
GG net debt Interest payments		Market access and funding sources	○ Excellent access	● Very good access	○ Neutral	○ Poor access	○ Very weak access
External economic risk International position International investment position	15%	Current account vulnerabilities	○ Excellent	● Good	○ Neutral	○ Poor	○ Inadequate
Importance of currency Current-account financing Current-account balance		External debt sustainability	○ Excellent	● Good	○ Neutral	○ Poor	○ Inadequate
T-W effective exch. rate Total external debt		Vulnerability to short-term shocks	○ Excellent resilience	● Good resilience	○ Neutral	○ Vulnerable to shock	○ Strongly vulnerable to shocks
Institutional and political risk Control of corruption	10%	Perceived willingness to pay	● Excellent	○ Good	○ Neutral	○ Poor	○ Inadequate
Voice & accountability		Recent events and policy decisions	○ Excellent	● Good	○ Neutral	○ Poor	○ Inadequate
Rule of law		Geo-political risk	○ Excellent	○ Good	● Neutral	○ Poor	○ Inadequate
Financial risk Non-performing loans	10%	Financial sector performance	○ Excellent	○ Good	○ Neutral	● Poor	○ Inadequate
Liquid assets		Financial sector oversight and governance	○ Excellent	○ Good	● Neutral	○ Poor	○ Inadequate
Credit-to-GDP gap		Macro-financial vulnerabilities and fragility	○ Excellent	○ Good	● Neutral	○ Poor	○ Inadequate
Indicative rating range	aaa						
QS adjustment	AAA						
Final rating	**AAA**						

* Implied QS notch adjustment = (QS notch adjustment for Domestic Economic Risk)*0.35 + (QS notch adjustment for Public Finance Risk)*0.30 + (QS notch adjustment for External Economic Risk)*0.15 + (QS notch adjustment for Institutional and Political Risk)*0.10 + (QS notch adjustment for Financial Stability Risk)*0.10

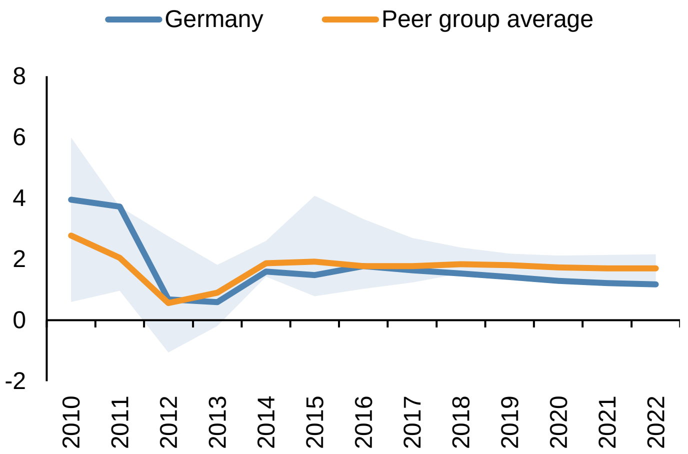
Source: Scope Ratings AG

Foreign- versus local-currency ratings

Germany's debt is issued predominantly in euros, or hedged. Because of its history of openness to trade and capital flows and the euro's reserve currency status, Scope sees no evidence that Germany would differentiate among any of its contractual debt obligations based on currency denomination.

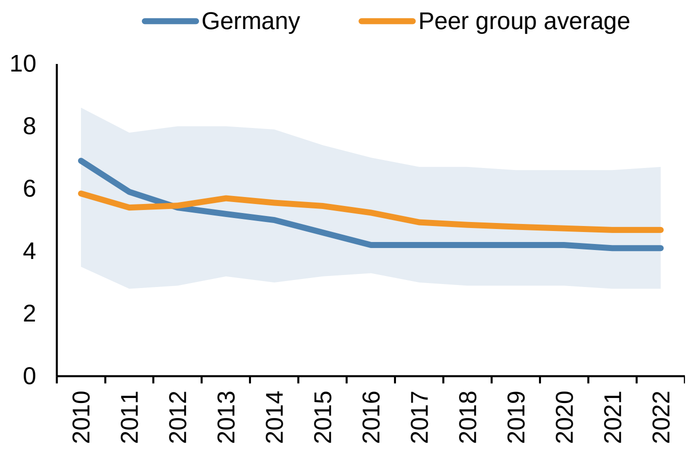
III. Appendix: Peer Comparison

Figure 8: Real GDP growth



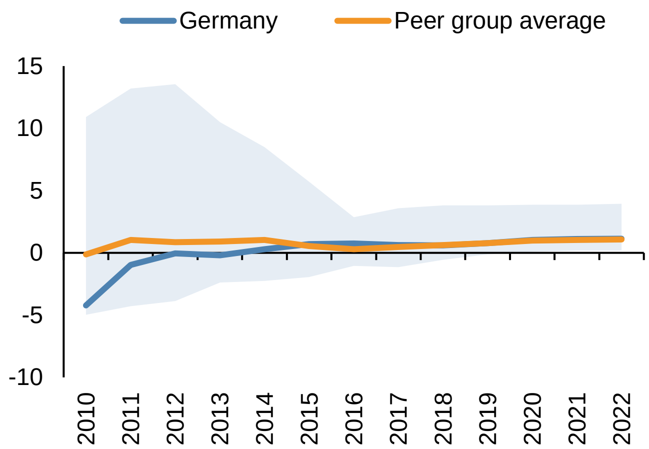
Source: IMF, Calculations Scope Ratings AG

Figure 9: Unemployment rate, % of total labour force



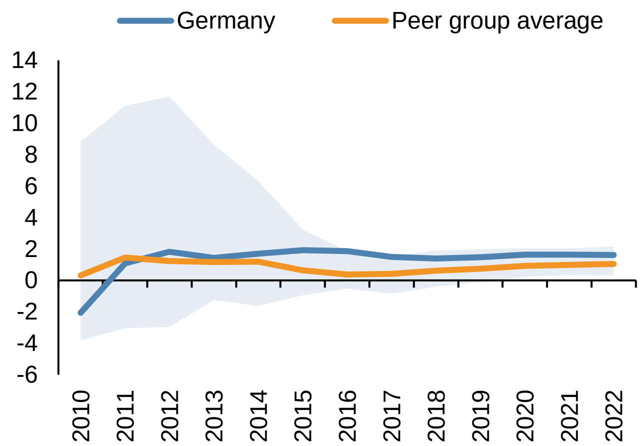
Source: IMF, Calculations Scope Ratings AG

Figure 10: General government balance, % of GDP



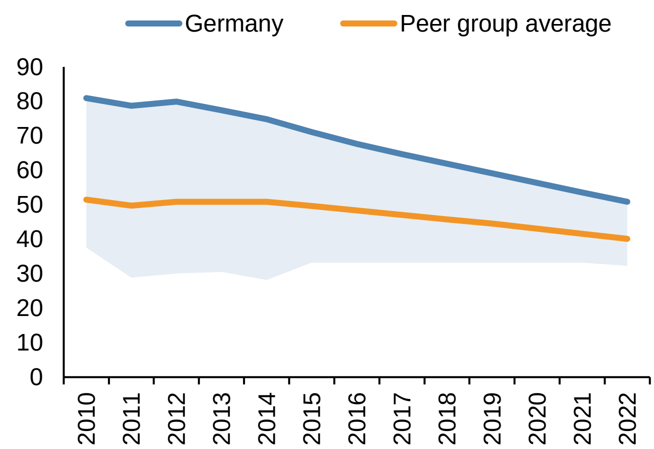
Source: IMF, Calculations Scope Ratings AG

Figure 11: General government primary balance, % of GDP



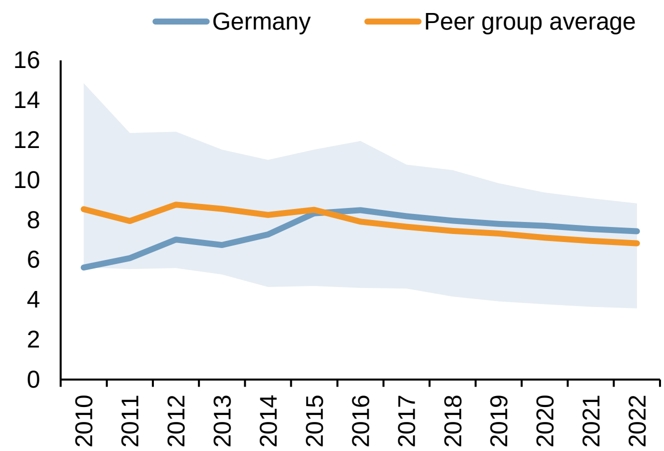
Source: IMF, Calculations Scope Ratings AG

Figure 12: General government gross debt, % of GDP



Source: IMF, Calculations Scope Ratings AG

Figure 13: Current-account balance, % of GDP



Source: IMF, Calculations Scope Ratings AG

IV. Appendix: Statistical Tables

	2012	2013	2014	2015	2016	2017E	2018F
Economic performance							
Nominal GDP (EUR bn)	2,758.3	2,826.2	2,923.9	3,032.8	3,132.7	3,222.8	3,317.0
Population ('000s)	81,066.2	81,265.1	81,489.7	81,707.8	81,914.7	82,114.2	82,293.5
GDP per capita PPP (USD)	43,564.2	45,273.1	47,099.7	48,041.7	-	-	-
GDP per capita (EUR)	34,295.7	35,044.9	36,105.6	37,127.3	37,865.5	38,827.9	39,846.6
Real GDP growth, % change	0.69	0.59	1.60	1.48	1.77	1.6%	1.9%
GDP growth volatility (10-year rolling SD)	2.9	2.8	2.8	2.8	2.7	2.6	2.6
CPI, % change	2.12	1.59	0.78	0.13	0.38	2.02	1.68
Unemployment rate (%)	5.4	5.2	5.0	4.6	4.2	4.2	4.2
Investment (% of GDP)	19.3	19.5	19.8	19.2	19.1	19.1	19.2
Gross national savings (% of GDP)	26.3	26.2	27.0	27.6	27.6	27.3	27.2
Public finances							
Net lending/borrowing (% of GDP)	0.0	-0.2	0.3	0.7	0.8	0.6	0.6
Primary net lending/borrowing (% of GDP)	1.8	1.4	1.7	1.9	1.9	1.5	1.4
Revenue (% of GDP)	44.3	44.5	44.7	44.7	45.1	45.1	45.1
Expenditure (% of GDP)	44.3	44.7	44.4	44.0	44.3	44.5	44.5
Net interest payments (% of GDP)	1.9	1.6	1.4	1.2	1.1	0.9	0.8
Net interest payments (% of revenue)	4.2	3.6	3.2	2.8	2.5	1.9	1.8
Gross debt (% of GDP)	79.9	77.5	74.9	71.2	67.6	64.7	62.0
Net debt (% of GDP)	54.8	53.8	50.6	47.8	45.0	42.7	40.6
Gross debt (% of revenue)	180.6	174.0	167.5	159.3	150.1	143.4	137.4
External vulnerability							
Gross external debt (% of GDP)	165.1	149.9	153.5	147.3	148.1	-	-
Net external debt (% of GDP)	3.2	-3.7	-6.5	-11.4	-13.9	-	-
Current-account balance (% of GDP)	7.0	6.7	7.3	8.3	8.5	8.2	8.0
Trade balance [FOB] (% of GDP)	-	7.5	7.7	8.7	8.8	8.3	8.0
Net direct investment (% of GDP)	1.0	0.7	2.5	1.8	0.7	-	-
Official forex reserves (EOP, USD m)	37,964.4	38,725.1	37,207.3	36,387.6	36,886.3	-	-
REER, % change	-3.3%	2.1%	0.8%	-4.3%	1.7%	-	-
Nominal exchange rate (EOP, USD/EUR)	1.3	1.4	1.2	1.1	1.1	-	-
Financial stability							
Non-performing loans (% of total loans)	2.9	2.7	2.3	2.0	-	-	-
Tier 1 ratio (%)	13.8	15.2	14.8	15.4	15.6	-	-
Consolidated private debt (% of GDP)	101.9	102.5	99.3	98.5	182.3	-	-
Domestic credit-to-GDP gap (%)	-9.9	-7.6	-8.8	-7.5	-5.2	-	-

Source: IMF, European Commission, European Central Bank, World Bank, United Nations, Scope Ratings AG

V. Regulatory disclosures

This credit rating and/or rating outlook is issued by Scope Ratings AG.

Rating prepared by Dr Giacomo Barisone, Lead Analyst

Person responsible for approval of the rating Dr Stefan Bund, Chief Analytical Officer

The ratings /outlook was first assigned by Scope as subscription rating on January 2003. The subscription ratings/outlooks were last updated on 05.05.2017.

As a "sovereign rating" (as defined in EU CRA Regulation 1060/2009 "EU CRA Regulation"), the ratings on Federal Republic of Germany are subject to certain publication restrictions set out in Art 8a of the EU CRA Regulation, including publication in accordance with a pre-established calendar (see "Sovereign Ratings Calendar of 2017" published on 30.06.2017 on www.scoperatings .com). Under the EU CRA Regulation, deviations from the announced calendar are allowed only in limited circumstances and must be accompanied by a detailed explanation of the reasons for the deviation. In this case the deviation was due to the recent revision of Scope's Sovereign Rating Methodology and the subsequent putting the ratings under review, in order to conclude the review and disclose these ratings in a timely manner, as required by the Article 10(1) of the CRA Regulation.

Rating Committee: the main points discussed were (1) economic growth potential and outlook, (2) soundness of public finance, (3) external economic position, (4) financial and banking sector performance, (5) latest political developments, (6) ageing population pressures and structural reforms agenda, (7) peers consideration.

Solicitation, key sources and quality of information

The rating was initiated by Scope and was not requested by the rated entity or its agents. The rated entity and/or its agents did not participate in the ratings process. Scope had no access to accounts, management and/or other relevant internal documents for the rated entity or related third party.

The following material sources of information were used to prepare the credit rating: public domain and third parties. Key sources of information for the rating include: the Ministry of Finance, Deutsche Bundesbank, Deutsche Finanzagentur, Federal Statistical Office, Stability Council, Eurostat, European Commission, IMF, OECD, and Haver Analytics.

Scope considers the quality of information available to Scope on the rated entity or instrument to be satisfactory. The information and data supporting Scope's ratings originate from sources Scope considers to be reliable and accurate. Scope does not, however, independently verify the reliability and accuracy of the information and data.

Prior to publication, the rated entity was given the opportunity to review the rating and/or outlook and the principal grounds upon which the credit rating and/or outlook is based. Following that review, the rating was not amended before being issued.

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